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# PUBLIC HEALTH REPORTS

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## INFLUENZA.

### RELATIVE TO A POSSIBLE RECURRENCE OF THE EPIDEMIC DURING THE FALL OR WINTER.

So much has been said and written about the probability of the recurrence of the pandemic of influenza this winter, the Public Health Service has felt that it should make some comment on the subject. Quite frankly no one can say with any certainty whether there will be a recurrence of last year's experience.

The statements submitted below are about all that can be said with any measure of assurance. There is such a widespread fear of influenza that the Public Health Service has suggested that the press publish these statements in full so that the public and even the medical profession may draw their own conclusions.

It will be observed that no mention has been made of a cure, or specific. So far as the most careful scientific investigations have been able to determine, none has been discovered; the suggested remedies which give most encouragement are even now in their experimental stage.

Evidence collected during last year's pandemic points strongly to infected eating and drinking utensils, especially in places where food and drink are sold to the public, as being *one* of the modes of transmission of this disease. In some municipalities this matter has already been made the subject of regulation, but the enforcement of the regulations often leaves much to be desired.

The following are the statements which have been issued by the Service:

Probably, but by no means certainly, there will be a recurrence of the influenza epidemic this year.

Indications are, that should it occur, it will not be as severe as the previous pandemic.

City officials, State and city boards of health, should be prepared in the event of a recurrence.

The fact that a previous attack brings immunity in a certain percentage of cases should allay fear on the part of those afflicted in the previous epidemic.

Influenza is spread by direct and indirect contact.

It is not yet certain that the germ has been isolated, or discovered, and as a consequence there is yet no positive preventive, except the enforcement of rigid rules of sanitation and the avoidance of personal contact.

A close relation between the influenza pandemic and the constantly increasing pneumonia mortality rate prior to the fall of 1918 is recognized.

It is now believed that the disease was pretty widely disseminated throughout the country before it was recognized in its epidemic state. This failure to recognize the early cases appears to have largely been due to the fact that every interest was then centered on the war.

Following is the revised text of the popular leaflet on influenza published by the Public Health Service last year. This will be reprinted and made available for wide distribution to meet the demands of health officers and others interested in the control of the disease. The reprint will thus supersede Supplement No. 34. Copies may be obtained by addressing the Surgeon General, United States Public Health Service, Washington, D. C.

**"Spanish Influenza"—"The Flu."**

*What is Spanish influenza? Is it something new? Does it come from Spain?*

The disease called "Spanish influenza" usually resembles a very contagious kind of "cold" accompanied by fever, pains in the head, eyes, ears, back or other parts of the body, and a feeling of severe sickness. In most of the cases the symptoms disappear after three or four days, the patient then rapidly recovering; some of the patients, however, develop pneumonia, or inflammation of the ear, or meningitis; and many of these complicated cases die. Sometimes the symptoms are so mild that the true condition is unsuspected. "Spanish influenza" is apparently identical with the epidemics of influenza of earlier years.

In this connection attention is called to the fact that the pandemic of 1889-1891 originated in China and was carried to Russia, where it was known as "Chinese influenza." From Russia it spread throughout Europe and was spoken of as "Russian influenza." Introduced from Europe into the United States it was called "European influenza," and finally when it crossed the Pacific into Japan it was called "American influenza."

Epidemics of influenza have visited this country since 1647. It is interesting to know that this first epidemic was brought here from Valencia, Spain. Since that time there have been numerous epidemics of the disease. In 1889 and 1890 the disease was epidemic

over practically the entire civilized world. Three years later there was another flare-up of the disease. Both times the epidemic spread widely over the United States.

Although the recent epidemic is called "Spanish influenza," investigation has shown that it did not originate in Spain.

We now know that there was an undue prevalence of influenza in the United States for several years preceding the recent great pandemic. Because the disease occurred in a mild form, and because the public mind was focused on the war, this increased prevalence of the disease escaped attention. Not until the epidemic appeared in severe form in Boston in September, 1918, did it excite any special interest.

*How can "Spanish influenza" be recognized?*

There is as yet no certain way in which a single case of "Spanish influenza" can be recognized; on the other hand, recognition is easy where there is a group of cases. In contrast to the outbreaks of ordinary coughs and colds, which usually occur in the cold months, epidemics of influenza may occur at any season of the year; thus the recent epidemic raged most intensely in Europe in May, June, and July of 1918. Moreover, in the case of ordinary colds, the general symptoms (fever, pain, depression) are by no means as severe or as sudden in their onset as they are in influenza. Finally, ordinary colds do not spread through the community so rapidly or so extensively as does influenza.

In most cases a person taken sick with influenza feels sick rather suddenly. He feels weak, has pains in the eyes, ears, head or back, abdomen, etc., and may be sore all over. Many patients feel dizzy, some vomit. Most of the patients complain of feeling chilly, and with this comes a fever in which the temperature rises to 100° to 104° F. In most cases the pulse remains relatively slow.

In appearance one is struck by the fact that the patient looks sick. His eyes and the inner side of his eyelids may be slightly "bloodshot," or "congested," as the doctors say. There may be running from the nose, or there may be some cough. These signs of a cold may not be marked; nevertheless the patient looks and feels very sick. In a number of instances during the recent pandemic a large proportion of the cases of influenza showed an intestinal (diarrheal) type of infection.

In addition to the appearance and the symptoms as already described, examination of the patient's blood may aid the physician in recognizing "Spanish influenza"; for it has been found that in this disease the number of white corpuscles shows little or no increase above normal.

*What is the course of the disease? Do people die of it?*

As already mentioned most of the cases are apparently infections of the respiratory organs and resemble a very contagious kind of "cold." Sometimes, however, respiratory symptoms are entirely absent and there are merely severe depression, weakness, aches, and pains throughout the body, and some fever. In still other cases diarrhea is a prominent symptom.

Ordinarily, the fever lasts from three to four days and the patient recovers. But while the proportion of deaths is usually low, in some places the outbreak is severe and deaths are numerous. When death occurs it is usually the result of the development of a pneumonia or of some other complication.

*What causes the disease and how is it spread?*

Bacteriologists who have studied influenza epidemics in the past have found in many of the cases a very small rod-shaped germ called, after its discoverer, Pfeiffer's bacillus. In other cases of apparently the same kind of disease there were found pneumococci, the germs of lobar pneumonia. Still others have been caused by streptococci, and by other germs.

Several European observers, on the basis of experiments conducted during the recent pandemic, believe that the germ of influenza is no ordinary bacterium but that it belongs to a class of exceedingly small germs spoken of as "filterable viruses", because they can pass through the pores of unglazed porcelain filters.

No matter what particular kind of germ causes the epidemic, it is now known that influenza is spread directly and indirectly from person to person. Moreover, judging from experience in other diseases, it is probable that the germ, whatever its nature, is carried about not only by those who are ill with influenza but by persons who may be entirely well. Everything which increases personal contact, therefore, should be regarded as a factor in spreading influenza.

It is clear that there are many different ways in which such germs may be spread from person to person. Thus they may be spread quite directly by being carried with the air along with the very small droplets of mucus expelled by coughing, sneezing, forceful talking, and the like, by one who already has the germs of the disease. To guard against this mode of spread the use of face masks has been advocated. Though the use of suitably constructed masks will reduce the interchange of respiratory germs through inhalation, it must be remembered that there are many other paths by which such germs are spread, either directly or indirectly. Soiled hands, common drinking cups, improperly cleaned eating and drinking utensils in restaurants, soda fountains, etc., roller towels, infected food—these are only a few of the common vehicles of germ transmission.

The use of face masks appears to make people neglect these other paths of infection, and therefore such use has not been attended with the success predicted for them. If we would be more successful in combating influenza, greater attention must be paid to the factors just enumerated.

*What should be done by those who catch the disease?*

It is very important that every person who becomes sick with influenza should go home at once and go to bed. This will help keep away dangerous complications and will, at the same time, keep the patient from scattering the disease far and wide. It is highly desirable that no one be allowed to sleep in the same room with the patient. In fact, no one but the nurse should be allowed in the room.

If there is cough and sputum or running of the eyes and nose, care should be taken that all such discharges are collected on bits of gauze or rag, or paper napkins, and burned. If there is diarrhea, great care should be taken to prevent spreading the disease through soiling of the hands, clothing, or bed linen. Practically the same precautions that a nurse takes when attending a case of typhoid fever should then be instituted. If the patient complains of fever and headache he should be given water to drink, a cold compress to the forehead, and a light sponge bath. Only such medicine should be given as is prescribed by the doctor. It is foolish to ask the druggist to prescribe, and may be dangerous to take the so-called "safe, sure, and harmless" remedies advertised by patent medicine manufacturers.

If the patient is so situated that he can be attended only by some one who must also look after others in the family, it is advisable that such attendant wear a wrapper, apron, or gown over the ordinary house clothes while in the sick room, and slip this off and wash and disinfect his hands when leaving to look after the others. The patient should have separate dishes, and these should be sterilized with *boiling* water after use.

Nurses and attendants will do well to guard against breathing in dangerous disease germs by wearing a simple fold of gauze or mask while near the patient.

*Will a person who has had influenza before catch the disease again?*

It is well known that an attack of measles or scarlet fever or smallpox usually protects a person against another attack of the same disease. To some extent this appears to be true also of "Spanish influenza." Just how long such protection lasts is not known.

*How can one guard against influenza?*

In guarding against disease of all kinds, it is important that the body be kept strong and able to fight off disease germs. This can be done by having a proper proportion of work, play, and rest, by keeping the body well clothed, and by eating sufficient, wholesome,

and properly selected food. In connection with diet, it is well to remember that milk is one of the best all-around foods obtainable for adults as well as children. In a disease like influenza health authorities everywhere recognize the very close relation between its spread and overcrowding. While it is not always possible, especially in times like the present, to avoid overcrowding, people should consider the health danger and make every effort to reduce home overcrowding to a minimum. The value of fresh air through open windows can not be overemphasized.

So far as avoidance of direct infection through inhalation is concerned, it is important to beware of the person who coughs or sneezes without covering his mouth and nose. It also follows that one should keep out of crowds and stuffy places as much as possible; keep homes, offices, and workshops well aired; spend some time out of doors each day; walk to work if at all practicable; in short, make every effort to breathe as much pure air as possible.

The indirect transmission of influenza, while more difficult to avoid, can yet be guarded against by a little thought. Less shaking of hands, shunning unclean soda fountains and restaurants, avoiding the use of common drinking cups and common towels, insistence on the observance of sanitary practices in food-handling establishments, and on the enforcement, by the authorities, of sanitary regulations governing such places—these are all measures by which every citizen can safeguard himself against infection. Their more general practice would do much to prevent the spread of disease generally. To a large extent the prevention of influenza can be summed up in the single word "Cleanliness."

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## ORDINANCE REQUIRING PRIVIES HELD VOID.

**FLORIDA SUPREME COURT DECLARES PENSACOLA ORDINANCE VOID BECAUSE IT PERMITS OF ARBITRARY DISCRIMINATION BY CITY AUTHORITIES.**

The Supreme Court of Florida has decided<sup>1</sup> that an ordinance of Pensacola, requiring "every house and building \* \* \* however used or occupied" to have a sanitary privy and requiring compliance with its provisions, after receipt of a notice, "within 15 days \* \* \* or within such further time as the commissioner of health may allow," is inoperative and void, on the ground that it "permits an arbitrary discrimination by the city authorities." Portions of the opinion follow:

Section 1 is attacked because it requires "every house or building, \* \* \* however used or occupied," to have a specially connected or constructed privy. This would require churches, garages, barns, warehouses, stables, stores, or any other

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<sup>1</sup> Ellis, City Marshal, v. Thiesen, 82 South. 607.